

REMARKS/ARGUMENTS

Claims 3-24 are pending. Claims 1 and 2 have been canceled without prejudice or disclaimer.

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yu, U.S. Patent No. 5,764,903, and in view of Wipfel et al., U.S. Patent No. 6,353,898.

This application was supported with funding from the National Science Foundation. A government license clause required pursuant to 35 U.S.C. § 202(c)(6) has been added to the specification.

The specification and Abstract have been amended to emphasize that the present invention is directed to information processing systems in general, which can include information backup systems. The descriptions of Figs. 1 and 2 have been amended to more accurately describe the figures as showing a distributed information processing system. References to the specification are made with respect to the substitute specification filed April 26, 2004.

The present invention as recited in independent claim 3, for example, includes a plurality of computer systems connected to a communication network. A functionally coherent and physically distributed cache memory is comprised of a plurality of memory portions. Each memory portion is provided by the memory of a computer system amongst a first set of the computer systems. Similarly, a functionally coherent and physically distributed data storage device is comprised of a plurality of data storage portions. Each data storage portion is provided by a data storage device of a computer system from the first set of computer systems. As recited in claim 4, the cache memory operates as a data cache for I/O with the functionally coherent and physically distributed data storage device; kindly see also independent claim 22.

The rejection of claims 1 and 2 are moot. Moreover, appended claims 3-24 are neither taught nor rendered obvious in view of the disk mirroring technique disclosed by Yu or resource management in a clustered system as described by Wipfel et al.

Yu does not teach or suggest the physically distributed yet functionally coherent cache memory recited in the pending claims. Similarly, Yu does not teach or suggest the

physically distributed yet functionally coherent data storage device also recited in the pending claims.

Fig. 2 of Wipfel et al. shows a Node A 106 having a local memory 218 and a shared memory 220 which is accessible by other nodes. *Col. 8, lines 11-20*. An example of their use of the shared memory 220 is a buffer in the shared memory that can be allocated to a node. *Id at lines 21-25*. Wipfel et al. do not teach providing a functionally coherent cache memory from the shared memories 220 of the nodes. In addition, and based on the foregoing example, Wipfel et al do not suggest providing using the collective shared memories 220 as a functionally coherent cache memory. Wipfel et al. do not suggest that their shared memories 220 operate as a data cache for a functionally coherent and physically distributed data storage device.

CONCLUSION

In view of the foregoing, all claims now pending in this Application are believed to be in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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